

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Please delete the paragraph on page 16, lines 8-17 and replace it with the following paragraph:

--**Figures 10a & b.** (a) Structure of T-DNA region of pSa7. RB, right border of the transferred DNA (T-DNA); NOS-Pro, nopaline synthase (NOS) promoter; NPT II, neomycin phosphotransferase II gene encoding resistance to kanamycin (Kan^R); NOS-ter, NOS terminator; CaMV 35S-Pro, promoter of cauliflower mosaic virus (CaMV) 35S RNA; *SaPIN2a*, *Solanum americanum* proteinase inhibitor IIa; LB, left border of the T-DNA. (b) DNA sequence of junction of CaMV 35S promoter and *SaPIN2a* cDNA in pSa7 (SEQ ID NO: 15). The sequence in italics is from parent binary vector pBI121 and the remaining sequence is from the plasmid pSa2, a pBluescript II SK-derivative containing the full-length *SaPIN2a* cDNA (Xu *et al.*, 2001, *Plant Mol. Biol.* 47: 727-738). The transcription start site (Jefferson *et al.*, 1987, *EMBO J.* 6, 3901-3907) is underlined. The start codon (atg) of *SaPIN2a* is in bold.--

Please delete the paragraphs on page 18, lines 12-22 and replace them with the following paragraphs:

--**Figure 18.** pMLVHisA plastid transformation vector. The flanking regions *rbcL* and *accD*, derived from the tobacco plastid genome, are used in homologous recombination during plastid transformation. *P_{psbA}* represents the promoter regulating expression of the inserted gene and *T_{psbA}*, the terminator. *P_{rrn}* represents the promoter driving expression of the spectinomycin-resistance marker *aadA* and *T_{rbcL}*, the *rbcL* terminator.

Met represents the start codon for the expressed recombinant (His)₅-tagged protein (5xHis tag disclosed as SEQ ID NO: 16).

Figure 19. The pMLVHisP plastid transformation vector containing the *SaPIN2a* cDNA. To generate pMLVHisP, a 0.5-kb *NotI* fragment of *S. americanum* cDNA encoding proteinase inhibitor II protein (*SaPIN2a*) was cloned in the *NotI* site of pMLVHisA. The (His)₅-tag (5xHis tag disclosed as SEQ ID NO: 16) and *SaPIN2a* is fused in-frame. Primers ML330P, ML399, ML400 and ML422 were used in PCR analysis for detection of the recombinant DNA insert in the plastid transformants. The expected PCR-amplified fragments of 0.63-kb and 1.1-kb are indicated.--

Please delete the paragraph on page 27, lines 19-29 and replace it with the following paragraph:

--Isolation of proteins can be accomplished by gel filtration chromatography, affinity chromatography including the use of affinity tags, recombinant protein A expanded bed adsorption chromatography (Valdes R. *et al.*, 2003, *Biochem. Biophys. Res. Comm.* 308: 94-100); single-step purification without chromatography, e.g. use of oleosin-fusions (Boothe *et al.*, 1997, *Drugs Dev. Res.* 42:172-181), and the use of protein-based polymer GVGVP (SEQ ID NO: 17) encoded by synthetic genes (Daniell *et al.*, 2001, *Trends in Plant Science* 6: 219-226). His-tagged proteins can be purified by immobilized-metal affinity chromatography, using an affinity column of Nickel-Nitrilotriacetic acid (Ni-NTA) Agarose (Qiagen) according to the manufacturer's instructions. See also Janknecht *et al.*, 1991, *Proc. Natl. Acad. Sci.* 88: 8972-8976: The His-tag binds Ni-NTA. This His-tag can be fused at either the N-terminal or the C-terminal end of the desired peptide.--

Please delete the paragraph on page 43, lines 21-24 and replace it with the following paragraph:

--The SaPIN2a plastid expression vector pMLVHisP was generated from plasmid vector pMLVHisA (Figure 18). A 0.5-kb *NotI* fragment of *S. americanum* cDNA encoding proteinase inhibitor II protein SaPIN2a was cloned in the *NotI* of pMLVHisA, with (His)₅ (SEQ ID NO: 16) and SaPIN2a fused in-frame, to produce plasmid pMLVHisP (Figure 19).--

Please add the following paragraph after the last paragraph on page 58:

--7. DEPOSIT

Plasmid vectors pSa7 and pMLVHisA were deposited with China Center for Type Culture Collection (CCTCC) at Wuhan University, Wuhan 430072 in China on June 9, 2005 and July 25, 2005, respectively, in accordance with the Budapest Treaty on the Deposit of Microorganisms, and accorded accession Nos. CCTCC M 205062 and CCTCC M 205084, respectively, which are incorporated herein by reference in their entireties. These plasmid vectors are described, for example, in Section 6.1, *supra*.--

Sequence Listing

The specification and the Sequence Listing are objected to because sequence identifiers are missing from the Brief Description of Fig. 10b.

The specification is herein amended as shown above to include sequence identifiers. A substitute Sequence Listing incorporating the amendment is submitted

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herewith in a paper form and a computer readable form pursuant to 37 C.F.R. §§ 1.821-1.825.

Accordingly, Applicants respectfully request that the objection be withdrawn.